

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI  
(MID SEMESTER EXAMINATION)**

**CLASS: B.AECH.  
BRANCH: ARCHITECTURE**

**SEMESTER : I  
SESSION : MO/2025**

**SUBJECT: AR102 PRIMARY BUILDING MATERIALS**

**TIME: 02 Hours**

**FULL MARKS: 25**

**INSTRUCTIONS:**

1. The question paper contains 5 questions, each of 5 marks and total 25 marks.
  2. Attempt all questions.
  3. The missing data, if any, may be assumed suitably.
  4. Tables/Data handbook/Graph paper etc., if applicable, will be supplied to the candidates
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		CO	BL
Q.1(a)	Explain the manufacturing process of bricks in details.	[2] 1	1
Q.1(b)	What are the constituents of good brick earth? How does excess of each of the constituents affects the quality of bricks?	[3] 1	2
Q.2(a)	What is Artificial Stone? Mention the advantages of Artificial Stone.	[2] 2	2
Q.2(b)	Discuss the geological classification of stone.	[3] 2	1
Q.3(a)	What is meant by dressing of a stone? Describe its various varieties.	[2] 2	2
Q.3(b)	<ul style="list-style-type: none"><li>• A frog is placed on raw bricks during moulding</li><li>• A small quantity of oxide of iron is desirable in good brick earth.</li></ul>	[3] 3	3
Q.4(a)	Draw a neat cross-section of stem of an exogenous tree and show various components of it.	[2] 2	1
Q.4(b)	What is seasoning of timber? Why it is required? State various methods of seasoning and explain any two.	[3] 1	4
Q.5(a)	Distinguish between the following: <ul style="list-style-type: none"><li>• Natural stone &amp; Artificial stone</li><li>• English Bond and Flemish Bond</li></ul>	[2] 3	4
Q.5(b)	Briefly describe the following: <ul style="list-style-type: none"><li>• Dressing of stone</li><li>• Rubble Masonry</li></ul>	[3] 1	1

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